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DISA CARDINALIS LINDER (ORCHIDACEAE), A NEW SPECIES FROM THE CAPE PROVINCE

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Abstract

Disa cardinalis Linder, sp. nov. (Orchidaceae), is described from the Riversdale area of the Cape Province.

Uittreksel

DISA CARDINALIS LINDER (ORCHIDACEAE), 'N NUWE SOORT VANAF KAAPLAND

Disa cardinalis Linder, sp. nov. (Orchidaceae), van die Riversdale gebied van Kaapland word beskryf.

Introduction

A red-flowered *Disa*, previously regarded as a colour form of *Disa tripetaloides* (L.f.) N.E.Br., is in cultivation, and is being used in a hybridization programme. Taxonomic studies on the *Disinae* showed that this taxon should be recognized as a distinct species. In view of the bright red colour of the flowers the name *Disa cardinalis* is proposed.

Taxonomy

Disa cardinalis Linder, sp. nov., differt a *D. tripetaloides* (L.f.) N.E.Br. floribus majoribus et carminis.

Plants slender, erect, 300–600 mm tall; tubers testicular, c. 15 mm long; roots thick, unbranched, villous; slender white stolons with bracts regularly produced. *Leaves* at the base of the stem semi-erect, very narrowly elliptic, acute, 50–100 mm long, clustered, 6–10; the rest distant on the stem, 15–30 mm long, very acute to acuminate, completely sheathing. *Inflorescence* sub-imbricate, up to 150 mm long and with 8–20 flowers; bracts narrowly ovate, subacuminate, 10–25 mm long, as long as or slightly longer than the ovaries; flowers c. 25 mm in diameter, bright red. *Dorsal sepal* erect, galea 10–15 mm tall 8–10 mm wide and 6–8 mm deep, more or less acute, narrowly ovate in front view; spur conical, obtuse, c. 4 mm long. *Lateral sepals* patent, the apex often recurved, elliptic, obtuse to rounded, 18–28 mm long, apiculus 1 mm long. *Petals* included in the galea, horizontal, flanking the anther, narrowly oblong-trapezoid, fused to the rostellum,

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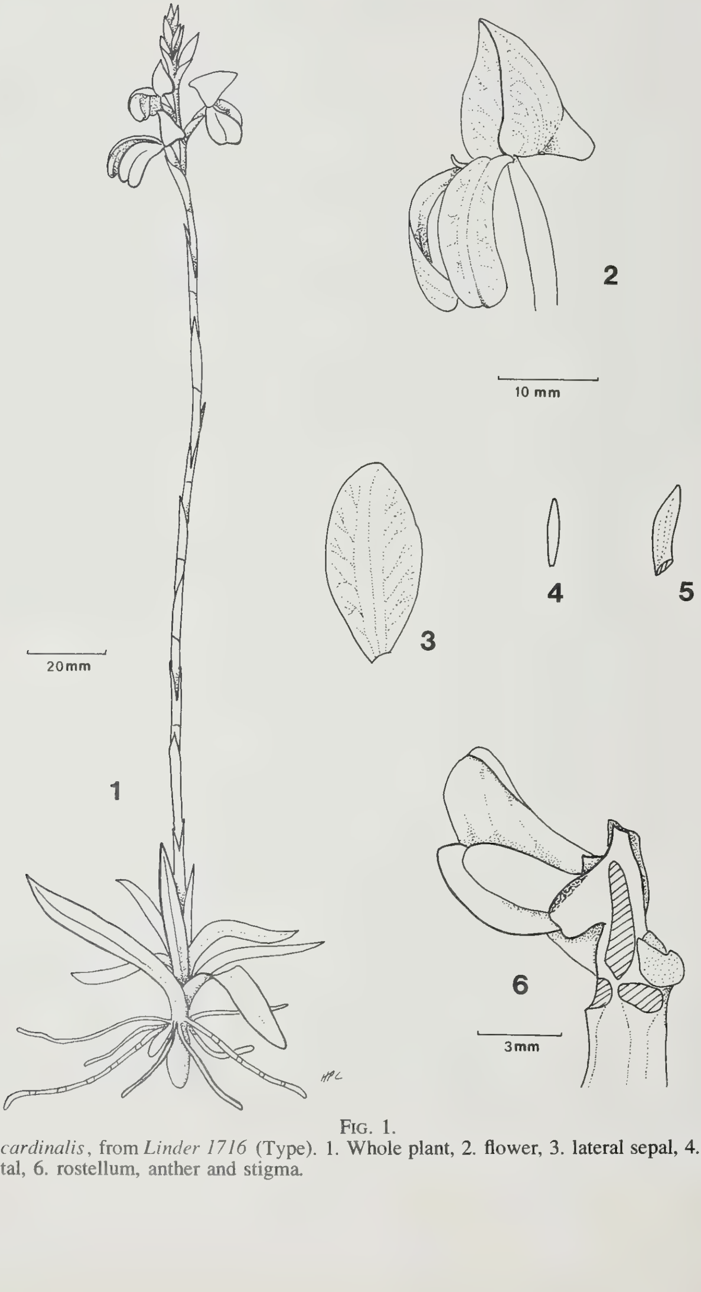

FIG. 1.
Disa cardinalis, from *Linder 1716* (Type). 1. Whole plant, 2. flower, 3. lateral sepal, 4. lip, 5. petal, 6. rostellum, anther and stigma.

the apex curved over the anther, 6–7 mm long and 2 mm wide. *Lip* patent, narrowly rhomboid, 6–7 mm long and 1–2 mm wide, subacute. *Rostellum* tri-lobed, lateral lobes erect, 3–4 mm tall, shallowly canaliculate, central lobe a small fold between the lateral lobes; anther horizontal, 3 mm long, viscidia globular, caudicles 2 mm long; stigma equally tri-pulvinate, sessile at the base of the rostellum, angled at 45 °, c. 1,5 mm in diameter.

Type: Riversdale, Garcias Pass, along streams, alt. 600 m, 15.xii.1977, *Linder 1716* (BOL, holotype; K, PRE).

This new species is part of the *D. tripetaloides* group, which is allied to *Disa uniflora* Berg. It can readily be recognized from its close relatives by the bright red flowers (*D. tripetaloides* is white, pink or yellow) which are about a third larger than in *D. tripetaloides.* The lateral sepals are 18–28 mm long, as opposed to 10–15 mm for *D. tripetaloides.*

Eco-geographically it is also separated from *D. tripetaloides.* The latter taxon is distributed along the Cape fold mountains from Stellenbosch to Port Shepstone. Along the Langeberg it occurs on the wet south-facing slopes of the range. *D. cardinalis* is restricted to the dry northern slopes of the range, between Barrydale and the gorge of the Gouritz River. Here it grows on stream-banks, often among rocks. The stoloniferous growth probably offers some protection to the plants against being washed away during floods, and also results in the development of clusters of plants.

The climate in the habitats can only be guessed at, as the southern slopes of the range have a high (but as yet unquantified, probably more than 1000 mm p.a.) rainfall, and frequent wet fogs from south-easter winds, while the Karoo to the north of the range receives scarcely more than 250 mm p.a. (W.B. 29). The rainfall is fairly evenly distributed over the year. The vegetation of the area has been described by Muir (1929, p. 60).

COLLECTIONS STUDIED

Barrydale, ex hort. Kirstenbosch, 1934, *s.l.* (BOL); Riversdale, Garcias Pass, October 1904, *Leipoldt* in Bolus *11381* (BOL, PRE); Riversdale, Garcias Pass, December 1977, *Linder 1716* (BOL, K, PRE).

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